



# COORDINATION NEWSLETTER

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## What's New on the Possible Link between Periodontal Disease and Preterm Low Birth Weight Babies?

### Women's Oral Health Status *An Update for CPSP Programs*

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Oral health status is an integral component of a woman's general health and well-being. This article will update you on some of the latest research linking periodontal disease and preterm low birth weight, and on the current concept about Caries prevention (i.e., How treating the mother's oral health condition will impact her offspring's oral health status).

#### What's New on the Possible Link between Periodontal Disease and Preterm Low Birth Weight Babies?

Please refer to the article

entitled "New Perspectives on Oral Health and Perinatal Care" in the Winter 1999 *Coordination* newsletter. The possible link between periodontal disease (PD) and preterm low birth weight (PTLBW) was first suggested in 1996 (1). Here is a brief summary of the most current research:

- A study at the University of Alabama documented that women with clinical signs of general PD were more likely to have a preterm birth compared to women who were periodontally healthy. This study also found that the risk of preterm birth

increases with increasing severity of PD (2). Most recently, this study showed that treating PD during pregnancy may decrease the mother's risk of having a PTLBW baby (3).

- In a comparison of pregnant women receiving periodontal therapy prior to delivery compared to pregnant women not receiving treatment, there was a lower combined incidence of preterm and low birth weight infants in the former group (although not statistically significant).
- An investigation of the relation between PD and

**Women's Oral Health**  
Continued on Page 4

#### Inside this issue:

Women's Oral Health Status	1
New CDC Guidelines Universal Screening for Group B Streptococcus	1
CPSP Provider Training Calendar	2
New Provider Profile La Sierra Clinica Familiar	2
New Perinatal Service Providers	5
Website Resources	6
Medi-Cal Questions File	6

### NEW CDC GUIDELINES:

#### *Universal Screening for Group B Streptococcus*

Emeterio Gonzalez, M.D. - Department of Health Services, Medical Consultant, Maternal & Child Health Branch

Group B Streptococci (GBS) have been known for many years to cause perinatal morbidity and mortality. These gram-positive bacteria can colonize the genitourinary tract and the rectal areas and are found in 10-30% of pregnant women. Life-threatening vertical transmission can occur from the mother to the

newborn:

- GBS infections can cause meningitis, pneumonia, and sepsis in neonates (4)
- In 1990 *Morbidity and Mortality Weekly Reports*, published by the CDC, revealed that 6% of early-onset GBS infections in neonates resulted in death.
- Approximately 7,600 episodes of GBS sepsis

occur every year in newborns in the U.S., (a rate of 1.8 per 1,000 live births). However, morbidity due to sepsis and to neurological sequelae is difficult to estimate. (4)

Since 1996, the American College of Obstetrics and

**CDC Guidelines**  
Continued on Page 3

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## CPSP Provider Training Calendar

### *Spring 2003*



#### Steps to Take

2 Day Provider Training  
Dates: February 4-5, 2003  
Time: 8am-4pm  
Location: Mt. San Antonio College  
Building #6 - Room 160  
1100 N. Grand Avenue  
Walnut CA 91789

#### Steps to Take

2 Day Provider Training  
Dates: April 2-3, 2003  
Time: 8am-4pm  
Location: Locations to be announced

**\*\*See Training Insert for more information**

### ***New Provider Profile***

## **La Sierra Clinica Medica Familiar** **Riverside, California**

The La Sierra Clinica Medica Familiar, located in Riverside, California, serves a predominately Hispanic population, meeting the needs for culturally competent and linguistically appropriate CPSP services, in a formerly underserved area. The clinic provides both comprehensive general medicine services as well as CPSP services, treating the whole family.

Dr. Chidozie C. Mbagwu, a Pediatrician and General Practice physician, opened her own clinic in April 2002. Dr. Mbagwu is a female Nigerian Physician, fluent in Spanish. She brings over ten years of experience working in various clinics, providing obstetrical and general practice experience to her patients. Dr. Mbagwu attended the Provider Overview and

Steps to Take trainings in April 2002. "I became interested in CPSP because I believe in patient education. The more knowledge a woman has in her pregnancy and beyond



**Nursing: A wonderful bonding experience**

the better the outcome is for the mother and child" states Dr. Mbagwu. The training, along with the expert advice from Diane Ewing, PSC for Riverside

County, has proven to be invaluable in setting up the CPSP Model of Care. The biggest challenge in setting up the CPSP program was the identification of the support team for the various disciplines, and securing their commitment to provide ongoing services and become part of her CPSP team.

The clinic is open seven days a week, with evening hours Monday through Friday. The clinic currently averages 1-3 deliveries per month and sees about 10 CPSP clients on a weekly basis.

Please join us in welcoming and congratulating La Sierra Clinica Medica Familiar as a new provider, and wishing for a successful community clinic.

"I became interested in CPSP because I believe in patient education. The more knowledge a woman has in her pregnancy and beyond the better the outcome is for the mother and child"

Dr. Mbagwu

## **CDC Guidelines-continued from page 1**

Gynecology has endorsed **two** guidelines for GBS: one based on the screening strategy and the other based on clinical risk of infection. Guidelines based on clinical risk of infection recommend testing for Group B streptococcus when the mother has one of the following (5):

- Premature rupture of membranes
- Premature labor without rupture of membranes
- Prolonged rupture of membranes (> 18 hours)
- Fever during labor
- Previous child with GBS

Either guideline may be appropriate for your practice, but a study by Schrag, et al, "A Population-Based Comparison of Strategies to Prevent Early-Onset of Group B Streptococcal Disease in Neonates," in the *New England Journal of Medicine* article, is worth investigation: (1) "...routine screening for Group B Streptococcus during pregnancy prevents more cases of Early-Onset Disease than the risk-based approach."

### **Treatment:**

Although there have been studies of patients treated prior to labor, most clinicians realize that patients become re-colonized. Clinical trials in the 1980's, and more recent studies by Schrag, indicate that antibiotic treatment is effective in preventing vertical GBS transmission. (2) Therefore, management for culture-positive women would

include intrapartum antibiotics.

The adverse effects of increased antibiotic use appear to be similar for universal screening or risk-based approaches. (1) Therefore, universal screening with selective intrapartum chemoprophylaxis is likely to prevent more early-onset neonatal GBS disease without increasing the risks of adverse effects.

### **Are there any maternal benefits?**

Interestingly, Locksmith, et al., concluded that universal screening was associated with significantly lower rates of clinical chorioamnionitis and endometritis than was the risk based strategy. (3) It should be noted that the Locksmith study did not show statistically significant improvement in neonatal outcome under the universal screening protocol.

### **References:**

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"...routine screening for Group B Streptococcus during pregnancy prevents more cases of early-onset disease than the risk-based approach."

Schrag, et.al.  
*New England Journal of Medicine*

## **CDC Screening Protocol**

Perform cultures on **all** prenatal patients at **35 to 37 weeks** of gestation.

Website: [www.cdc.gov/groupbstrep](http://www.cdc.gov/groupbstrep)

## Order Additional Training Manuals

Effective April 1, 2002 you may order additional [Steps to Take Manual](#) or [Provider Handbook](#) by calling Cassandra Mack at (909) 594-5611 extension 6115 or you may **download** these publications at no cost from the website: [www.mch.dhs.ca.gov](http://www.mch.dhs.ca.gov)

Research has demonstrated that poor maternal oral health status increases the risk of ECC among offspring

## Women's Oral Health-continued from page 1

restrictions on fetal growth suggests that maternal antepartum PD and PD worsening during pregnancy pose a significant risk to fetal growth (4).

- Researchers have demonstrated that women with fetal loss were more likely to have severe PD when compared to women with live births (5).

- Finally, a study in East London found no association between maternal PD and increased risk of PTLBW. However, the authors concluded that there remain several plausible biological mechanisms through which PD could cause PTLBW, perhaps in the presence of other specific genetic and environmental factors. They call for further studies to be conducted (6).

More conclusive data from current prospective studies are needed to strengthen this possible association. In the meantime, because PD

is preventable and treatable, increasing access to oral health care for women before and during pregnancy (including access to providers who perform procedures that prevent and treat PD) is a sound public health measure.

### What's New in Dental Caries Prevention?

Dental caries, the most common disease affecting children in the US, has been found to be a transmissible infectious disease. One form of dental caries in the primary dentition (baby teeth) is Early Childhood Caries (ECC). ECC is caused primarily by the presence of bacteria in the mouth, inappropriate infant feeding practices, and dietary and hygienic factors (7).

Research has demonstrated that poor maternal oral health status increases the risk of ECC among offspring (8). Specifically, the primary bacterium that causes

caries (*Streptococcus Mutans*, or SM) can be transmitted from the primary caretaker to the child. It seems that the colonization of bacteria within a child's mouth usually occurs during a relatively narrow "window of infectivity" from about 7 to 24 months of age (9). Furthermore, research shows that early infection with SM increases the risk of caries developing in the primary dentition.

These findings indicate the need to focus preventive efforts on mothers with high levels of SM to minimize the caries risk in their children. One of the ways to reduce the level of cariogenic (decay-causing) bacteria is to utilize an antibacterial agent (chlorhexidine gluconate). In one study, the maternal use of therapeutic chlorhexidine beginning at the end of the sixth month of pregnancy and continuing until delivery resulted in delays in the colonization of SM among offspring (10).

Another effective method is to replace sugar with noncariogenic sweeteners such as xylitol and sorbitol. A study concluded that habitual xylitol gum use by mothers was associated with a significant reduction of the probability of mother-child transmission of SM (11).

## Recommendations for improving women's oral health status and that of their children

- Include more oral health into general health
- Educate more health professionals on oral health issues related to women
- Change policies of publicly funded programs to continue to address women's oral health status
- Improve oral health status during pregnancy by expanding eligibility and coverage of services
- Train and educate dentists on the importance of treating pregnant women
- Conduct more research on women's oral health status
- Develop policies and programs to ensure women have access to needed oral health prevention and treatment programs

### DHS Programs and

**Women's Oral Health**  
Continued on Page 5



## **Women's Oral Health-continued from page 4**

### **Policies Addressing Women's Oral Health MCH-CPSP Program**

In 2001, the CPSP program included for the first time an Oral Health section in its Steps to Take Guidelines. Take advantage of these guidelines and client handouts and educate your population on the need for good oral health before, during and after pregnancy.

### **Current Denti-Cal Policies**

The FY 2001-02 budget added coverage for several new Denti-Cal procedures for selected pregnancy-and emergency-related Aid Codes, effective April 1, 2002.

Only pregnant women in restricted-scope Medi-Cal Aid Codes 44, 48, 5F, and 58 are eligible for 10 new benefits, which include exams and prophylaxes (cleanings) once every six months and subgingival curettage and root planning (periodontal treatment).

Hopefully these services will eventually be extended to all pregnant women.

### **For more information on the Denti-Cal program, contact:**

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Medi-Cal Dental Services  
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The FY 2001-02 budget added coverage for several new Denti-Cal procedures for selected pregnancy-and emergency-related Aid Codes

## **Welcome New Perinatal Service Coordinators (PSC's)**

**AMADOR COUNTY PUBLIC HEALTH**  
Karin Johnson, RN

**HUMBOLDT COUNTY HEALTH DEPT.**  
Alison Lorenz, RN, PHN

**MADERA COUNTY HEALTH DEPT.**  
Biana Grogg, RN, PHN

**RIVERSIDE COUNTY HEALTH DEPT.**  
Alice Sprockett, RN  
Assistant Perinatal Services Coordinator

**SHASTA COUNTY HEALTH DEPT.**  
Linda Price, RN, PHN

**SONOMA COUNTY HEALTH DEPT.**  
Rebecca Munger, CNM, PHN

### **Welcome Back**

**PLACER COUNTY HEALTH DEPT**  
Jackie Kampp, RN, BSN, CLC

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Page 6-Fall 2002

### Website Resources

- Dept. Of Health Services-  
Maternal and Child Health Branch:  
[www.mch.dhs.ca.gov](http://www.mch.dhs.ca.gov)
- CPSP:  
[www.mch.dhs.ca.gov/programs/cpsp](http://www.mch.dhs.ca.gov/programs/cpsp)
- Mt. San Antonio College:  
[www.mtsac.edu](http://www.mtsac.edu)
- Los Angeles County Public Health:  
[www.lapublichealth.org/mch](http://www.lapublichealth.org/mch)
- CDC Group B Streptococcus  
[www.cdc.gov/groupbstrep](http://www.cdc.gov/groupbstrep)
- Medi-Cal Policy Division:  
[www.medi-cal.ca.gov](http://www.medi-cal.ca.gov)



### Medi-Cal Questions File

by Jeanne Machado-Derdowski, DHS Medi-Cal Research Analyst

**Q: How do FQHC/RHCS who are CPSP providers bill for group counseling services?** (Previously printed in Coordination, Summer 2001)

**A.** Group counseling is not included as a preventive primary health service within the federal Public Health Services law which governs FQHCs and RHCs. Consequently, it is not a covered service within the Medicaid program. FQHCs/RHCs cannot bill one visit for each member of the group because it is not an allowable benefit.

If the FQHC/RHC is a CPSP provider, group counseling is provided under the CPSP program. However, it can only be billed as a SINGLE visit. Specifically, only one patient visit may be billed per each group health education class conducted by any health care professional. The provider should pick one beneficiary identification from all the group participants and bill one visit for the entire group.